

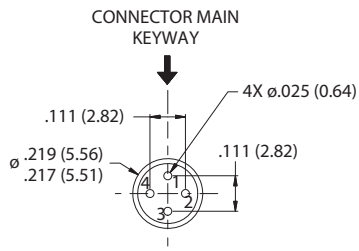
## MIL-DTL-38999 Series III Type

### 233-262 PC tail receptacles with shielded contacts

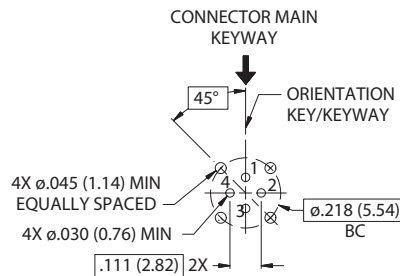
Part Number Development									
Sample Part Number	233-262				-H2	Z1	17	Q	-02 S N
Series / Basic Part No.	Series 23 SuperNine Hermetic								
Connector Style	H2 = Box Mount H7 = Jam-Nut, Mount DH7 = Dual O-ring Jam-Nut Mount H8 = Weld Mount								
Finish*	Z1 = CRES, Passivated ZL = CRES, Nickel Finish								
Shell Size*	Per MIL-STD-1560. See also special RF contact shell size/contact arrangements beginning on page D-6.								
RF Contact	C = Coax (see note 4) Q = Quadrax T = Concentric Twinax, size #8 only (see note 3)								
Insert Arrangement*	Per MIL-STD-1560. See also special RF contact shell size/contact arrangements beginning on page 8.								
Contact Style	P = Pin, PC Tail S = Socket, PC Tail								
Polarization*	A, B, C, D, E, N = Normal								

\*Refer to Section A for complete details, consult factory for additional options  
Modification codes may be added directly to the end of any valid part number

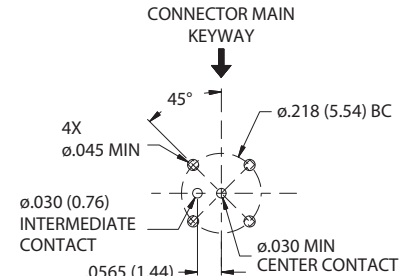
### 233-262 HIGH-SPEED / RF SHIELDED CONTACT, PCB FOOTPRINTS



QUADRAX PIN INTERFACE  
(CAVITY ID REFERENCE ONLY)  
FOR 100 OHM NOMINAL IMPEDANCE



RECOMMENDED QUADRAX  
PCB BOARD LAYOUT  
(PIN ID SHOWN)



RECOMMENDED  
TWINAX PCB LAYOUT

Contact Performance	
SIZE & TYPE	FREQ., MAX
16 Coax	500 MHz
8 Coax	1 GHz
8 Twinax (Conc.)	20 MHz
8 Quadrax	1 GHz

PC Tail Diameter	
CONTACT SIZE	PC TAIL ØL
No 22	.020 (0.51)/.018 (0.46)
No 20	.030 (0.76)/.028 (0.71)
No 16	.040 (1.02)/.038 (0.97)
No 12	.072 (1.83)/.070 (1.78)
No 8	.182 (4.62)/.178 (4.52)

**Material/finish:**

- Shell and jam-nut (H7 and DH7 only): 300 series CRES per part number development
- Contacts, pin: nickel-iron and nickel alloy/gold plate
- Contacts, socket: copper alloy/gold plate
- Hoods, sockets: CRES/passivate
- Insulator, hermetic: full glass/N.A.
- Insulator, socket: rigid dielectric/N.A.
- Seals: fluorosilicone blend elastomer/ N.A.

# SuperNine® Glass seal hermetic

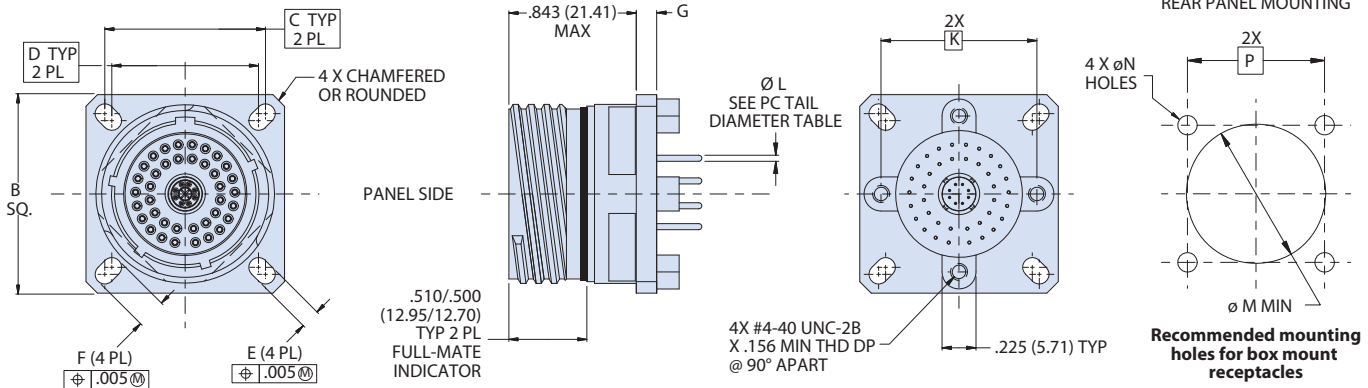


## MIL-DTL-38999 Series III Type

### 233-262 PC tail receptacles with shielded contacts

HERMETIC CONNECTORS

#### 233-262-H2 BOX MOUNT RECEPTACLE



Box Mount Receptacle Dimensions

SHELL SIZE	A THREAD	B SQ	C BSC	D BSC	E	F	G	K BSC
9	.6250-.1P-.3L-TS-2A	.949 (24.10) .925 (23.50)	.719 (18.26)	.594 (15.09)	.136 (3.45) .120 (3.05)	.224 (5.69) .208 (5.28)	.122 (3.10) .083 (2.11)	.594 (15.09)
11	.7500-.1P-.3L-TS-2A	1.043 (26.49) 1.019 (25.88)	.812 (20.62)	.719 (18.26)	.136 (3.45) .120 (3.05)	.202 (5.13) .186 (4.72)		.719 (18.26)
13	.8750-.1P-.3L-TS-2A	1.138 (28.91) 1.114 (28.30)	.906 (23.01)	.812 (20.62)	.136 (3.45) .120 (3.05)	.202 (5.13) .186 (4.72)		.812 (20.62)
15	1.0000-.1P-.3L-TS-2A	1.232 (31.29) 1.208 (30.68)	.969 (24.61)	.906 (23.01)	.136 (3.45) .120 (3.05)	.181 (4.60) .165 (4.19)		.906 (23.01)
17	1.1875-.1P-.3L-TS-2A	1.323 (33.60) 1.299 (32.99)	1.062 (26.97)	.969 (24.61)	.136 (3.45) .120 (3.05)	.202 (5.13) .186 (4.72)	.153 (3.89) .114 (2.90)	1.030 (26.16)
19	1.2500-.1P-.3L-TS-2A	1.449 (36.80) 1.425 (36.20)	1.156 (29.36)	1.062 (26.97)	.136 (3.45) .120 (3.05)	.202 (5.13) .186 (4.72)		1.150 (29.21)
21	1.3750-.1P-.3L-TS-2A	1.575 (40.00) 1.551 (39.40)	1.250 (31.75)	1.156 (29.36)	.136 (3.45) .120 (3.05)	.202 (5.13) .186 (4.72)		1.221 (31.01)
23	1.5000-.1P-.3L-TS-2A	1.701 (43.21) 1.677 (42.60)	1.375 (34.92)	1.250 (31.75)	.162 (4.11) .146 (3.71)	.250 (6.35) .234 (5.94)		1.360 (34.54)
25	1.6250-.1P-.3L-TS-2A	1.823 (46.30) 1.799 (45.69)	1.500 (38.10)	1.375 (34.92)	.162 (4.11) .146 (3.71)	.250 (6.35) .234 (5.94)		1.475 (37.47)

Box Mount, Mounting Hole Dimensions

SHELL SIZE	$\phi M$ MIN	$\phi N$ HOLES	P BSC	SHELL SIZE	$\phi M$ MIN	$\phi N$ HOLES	P BSC	SHELL SIZE	$\phi M$ MIN	$\phi N$ HOLES	P BSC
9	.656 (16.66)	.133 (3.38)	.724 (18.39)	15	1.047 (26.59)	.133 (3.38)	.973 (24.71)	21	1.421 (36.09)	.133 (3.38)	1.255 (31.88)
		.123 (3.12)	.714 (18.14)			.123 (3.12)	.963 (24.46)			.123 (3.12)	1.245 (31.62)
11	.781 (19.84)	.133 (3.38)	.817 (20.75)	17	1.218 (30.94)	.133 (3.38)	1.067 (27.10)	23	1.546 (39.27)	.159 (4.04)	1.380 (35.05)
		.123 (3.12)	.807 (20.50)			.123 (3.12)	1.057 (26.85)			.149 (3.78)	1.370 (34.80)
13	.921 (23.39)	.133 (3.38)	.911 (23.14)	19	1.296 (32.92)	.133 (3.38)	1.161 (29.49)	25	1.672 (42.47)	.159 (4.04)	1.505 (38.23)
		.123 (3.12)	.901 (22.89)			.123 (3.12)	1.151 (29.24)			1.495 (37.97)	1.495 (37.97)

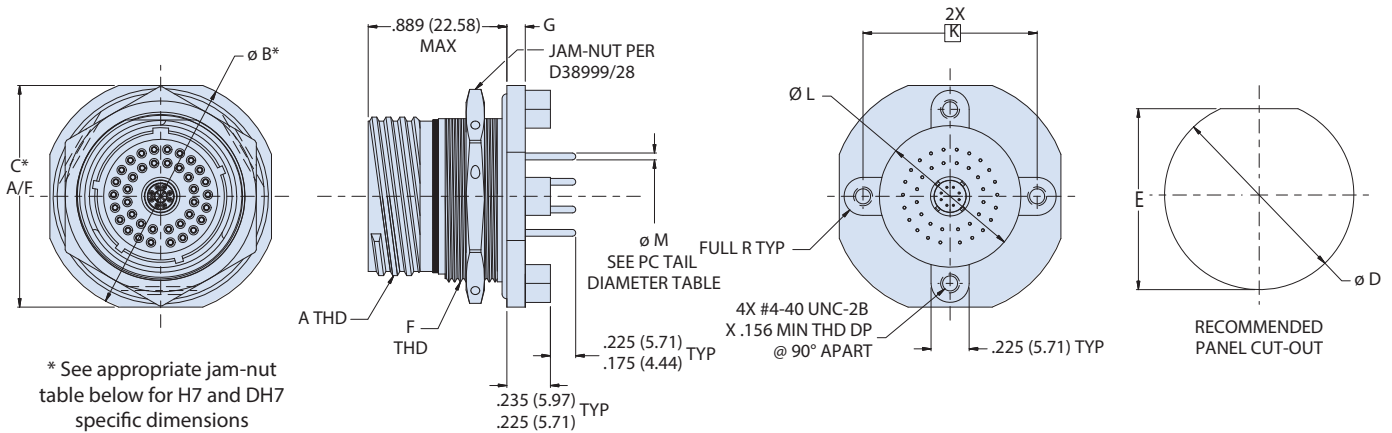
#### NOTES

- Hermeticity:  $<1 \times 10^{-7}$  ccHe/sec @ 1 ATM, delta pressure
- Insert arrangements per MIL-STD-1560
- See page B-8 "Standard 1560 RF Contact Arrangements". Arrangements are per MIL-STD-1560, and contact types are per the standard, or specified option. Where there are #12 and #8 in the arrangement, the options are #8 only. Size #16 are only available as coax. Consult factory for other contact options
- Coax contact mating interfaces shall be in accordance with the following:
  - Size #16 per M39029/76 and /77
  - Size #12 per M39029/102 and /103
  - Size #8 per M39029/59 and /60

## MIL-DTL-38999 Series III Type

### 233-262 PC tail receptacles with shielded contacts

#### 233-262-H7 JAM-NUT MOUNT RECEPTACLE AND 233-262-DH7 JAM-NUT MOUNT DUAL O-RING RECEPTACLE



Jam-Nut Dimensions					
SHELL SIZE	A THREAD .1P-.3L-TS-2A	F THREAD METRIC 0.100R	G	Ø L	K BSC
9	.6250	M17 X 1.0-6g	.122 (3.10) .083 (2.11)	.340 (8.64)	.594 (15.09)
11	.7500	M20 X 1.0-6g		.468 (11.89)	.719 (18.26)
13	.8750	M25 X 1.0-6g		.572 (14.53)	.812 (20.62)
15	1.0000	M28 X 1.0-6g		.705 (17.91)	.906 (23.01)
17	1.1875	M32 X 1.0-6g		.830 (21.08)	1.030 (26.16)
19	1.2500	M35 X 1.0-6g	.153 (3.89) .114 (2.90)	.934 (23.72)	1.150 (29.21)
21	1.3750	M38 X 1.0-6g		1.055 (26.80)	1.221 (31.01)
23	1.5000	M41 X 1.0-6g		1.160 (29.46)	1.360 (34.54)
25	1.6250	M44 X 1.0-6g		1.307 (33.20)	1.475 (37.47)

Jam-Nut (H7), Mounting Hole Dimensions		
SHELL SIZE	Ø B ±.012	C FLAT ±.016
9	1.189 (30.20)	1.063 (27.00)
11	1.375 (34.92)	1.252 (31.80)
13	1.500 (38.10)	1.374 (34.90)
15	1.626 (41.30)	1.500 (38.10)
17	1.752 (44.50)	1.626 (41.30)
19	1.937 (49.20)	1.811 (46.00)
21	2.063 (52.40)	1.937 (49.20)
23	2.189 (55.60)	2.063 (52.40)
25	2.311 (58.70)	2.189 (55.60)

Dual O-ring Jam-Nut (DH7), Mounting Hole Dimensions		
SHELL SIZE	Ø B	C FLAT
9	1.500 (38.10)	1.375 (34.92)
11	1.625 (41.28)	1.500 (38.10)
13	1.752 (44.50)	1.626 (41.30)
15	1.937 (49.20)	1.811 (46.00)
17	2.063 (52.40)	1.937 (49.20)
19	2.189 (55.60)	2.063 (52.40)
21	2.311 (58.70)	2.189 (55.60)
23	2.500 (63.50)	2.300 (58.42)
25	2.625 (66.68)	2.400 (60.96)

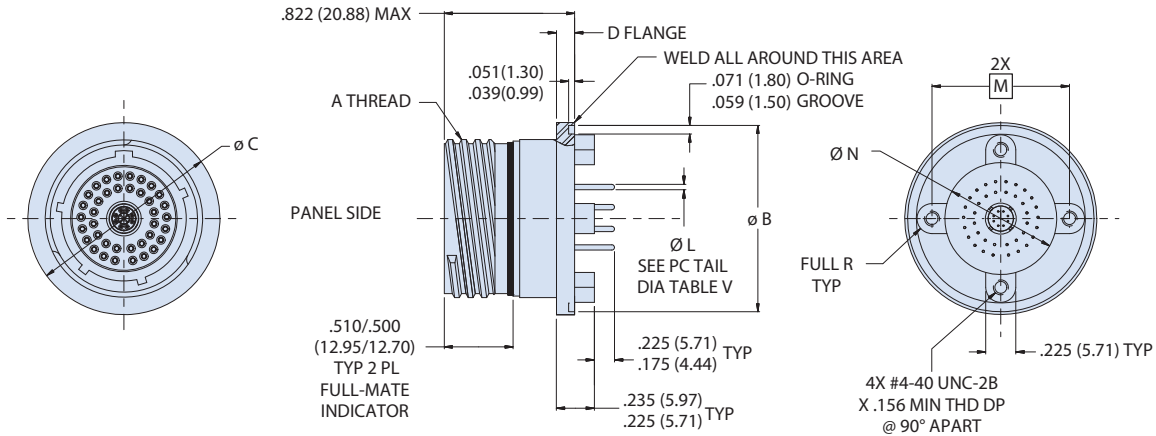
Jam-Nut, Mounting Hole Dimensions		
SHELL SIZE	Ø D	E DIM
9	.703 (17.86)	.661 (16.79)
	.693 (17.60)	.655 (16.64)
11	.835 (21.21)	.771 (19.58)
	.825 (20.96)	.761 (19.33)
13	1.020 (25.91)	.955 (24.26)
	1.010 (25.65)	.945 (24.00)
15	1.145 (29.08)	1.085 (27.56)
	1.135 (28.83)	1.075 (27.30)
17	1.270 (32.26)	1.210 (30.73)
	1.260 (32.00)	1.200 (30.48)
19	1.395 (35.43)	1.335 (33.91)
	1.385 (35.18)	1.325 (33.65)
21	1.520 (38.61)	1.460 (37.08)
	1.510 (38.35)	1.450 (36.83)
23	1.645 (41.78)	1.585 (40.26)
	1.635 (41.53)	1.575 (40.00)
25	1.770 (44.96)	1.710 (43.43)
	1.760 (44.70)	1.700 (43.18)

## MIL-DTL-38999 Series III Type

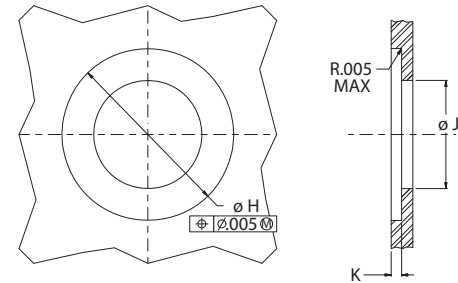
### 233-262 PC tail receptacles with shielded contacts

HERMETIC CONNECTORS

#### 233-262-H8 WELD MOUNT RECEPTACLE, D38999/21 TYPE



Weld Mount Receptacle Dimensions							
SHELL SIZE CODE	SHELL SIZE	A THREAD	ø B	ø C	D	M BSC	ø N
A	9	.6250-.1P-.3L-TS-2A	.941 (23.90) .929 (23.60)	.984 (24.99) .972 (24.69)	.134 (3.40) .118 (3.00)	.594 (15.09)	.340 (8.64)
B	11	.7500-.1P-.3L-TS-2A	1.063 (27.00) 1.051 (26.70)	1.106 (28.09) 1.094 (27.79)	.134 (3.40) .118 (3.00)	.719 (18.26)	.468 (11.89)
C	13	.8750-.1P-.3L-TS-2A	1.189 (30.20) 1.177 (29.90)	1.232 (31.29) 1.220 (30.99)	.134 (3.40) .118 (3.00)	.812 (20.62)	.572 (14.53)
D	15	1.0000-.1P-.3L-TS-2A	1.315 (33.40) 1.303 (33.10)	1.358 (34.49) 1.346 (34.19)	.134 (3.40) .118 (3.00)	.906 (23.01)	.705 (17.91)
E	17	1.1875-.1P-.3L-TS-2A	1.402 (35.61) 1.390 (35.31)	1.445 (36.70) 1.433 (36.40)	.134 (3.40) .118 (3.00)	1.030 (26.16)	.830 (21.08)
F	19	1.2500-.1P-.3L-TS-2A	1.547 (39.29) 1.535 (38.99)	1.591 (40.41) 1.579 (40.11)	.134 (3.40) .118 (3.00)	1.150 (29.21)	.934 (23.72)
G	21	1.3750-.1P-.3L-TS-2A	1.689 (42.90) 1.677 (42.60)	1.732 (43.99) 1.720 (43.69)	.134 (3.40) .118 (3.00)	1.221 (31.01)	1.055 (26.80)
H	23	1.5000-.1P-.3L-TS-2A	1.854 (47.09) 1.842 (46.79)	1.898 (48.21) 1.886 (47.90)	.165 (4.19) .149 (3.78)	1.360 (34.54)	1.160 (29.46)
J	25	1.6250-.1P-.3L-TS-2A	1.941 (49.30) 1.929 (49.00)	1.984 (50.39) 1.972 (50.09)	.165 (4.19) .149 (3.78)	1.475 (37.47)	1.307 (33.20)



Weld Mount, Mounting Hole Dimensions			
SHELL SIZE	ø H	ø J ±.005	DEPTH K ±.005
9	.990 (25.15)/.985 (25.02)	.635 (16.13)	.126 (3.20)
11	1.112 (28.24)/1.107 (28.12)	.760 (19.30)	.126 (3.20)
13	1.238 (31.45)/1.233 (31.32)	.885 (22.48)	.126 (3.20)
15	1.364 (34.65)/1.359 (34.52)	1.010 (25.65)	.126 (3.20)
17	1.451 (36.86)/1.446 (36.73)	1.195 (30.35)	.126 (3.20)
19	1.597 (40.56)/1.592 (40.44)	1.260 (32.00)	.126 (3.20)
21	1.738 (44.15)/1.733 (44.02)	1.385 (35.18)	.126 (3.20)
23	1.894 (48.11)/1.899 (48.23)	1.510 (38.35)	.157 (3.99)
25	1.990 (50.55)/1.985 (50.42)	1.635 (41.53)	.157 (3.99)